



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,174	02/06/2004	Paul Richard Granfors	141906XZ (15244US01)	7187
<div>7590 Christopher R. Carroll McAndrews, Held &amp; Malloy, Ltd. Suite 3400 500 West Madison Street Chicago, IL 60661</div>				
01/27/2009				
EXAMINER				
BITAR, NANCY				
ART UNIT		PAPER NUMBER		
2624				
MAIL DATE		DELIVERY MODE		
01/27/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/774,174

**Applicant(s)**

GRANFORS ET AL.

**Examiner**

NANCY BITAR

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 12-22 is/are allowed.  
6) ☒ Claim(s) 1-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Applicant's response to the last Office Action, filed 9/11/2008, has been entered and made of record.
2. Claims 1-14 are currently pending.
3. Applicant's arguments filed 10/17/2008 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) **1-11** are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process

NOTE: Regarding the rejection of claims 1-8, please see the Memorandum dated May 15, 2008, "Clarification of Processes under 35 USC § 101" which may be viewed at the following web address:

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/section101\\_05\\_15\\_2008.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/section101_05_15_2008.pdf)

***Allowable Subject Matter***

5. NOTE: Examiner did not find any relevant prior art to reject claims 1-11, but there is a rejection under 35 USC 101 for these claims.

6. Claims 12-22 are allowed.

7. The following is an examiner statement reasons for allowance. Claim 12 is allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found nay motivation to combine any of said prior art which teaches a system for detecting scintillator hysteresis artifacts in images from an x-ray detector, said system including:

an x-ray image including a first area of interest and a second area of interest,  
wherein said first area of interest has a first signal level and said second area of interest has a second signal level;  
readout electronics measuring said first signal level and said second signal level;  
and  
a data acquisition system determining a difference between said first signal level and said second signal level,

wherein said difference is compared to a threshold to detect a shape artifact from a prior image **due to scintillator hysteresis, wherein said shape artifact results from an area of trapped electrical charge in a scintillator.**

Kump et al (US 6,460,003) discloses the resolution calibration system provides the ability to relax resolution specifications of a digital image detector and allows calibration to a specific system level resolution according to a customer critical to quality specification whilst limiting the amount of resolution enhancement to achieve noise-related performance goals. Kump fails to specifically address the invention as claimed.

Fox et al (US 2005/0047546) teaches the detection of X-rays may be accomplished with a one- or two-dimensional array of scintillating elements. A scintillating element functions to absorb X-ray energy and re-emit the energy in the form of lower-energy photons, typically in the visible light range. A photodetector is usually attached to an outer surface of the scintillator to detect the light produced by the interaction of the X-rays with the scintillator. The magnitude of the electrical signal from the photodetector (which is a function of the flux of X-rays that hit the detector element) is used to represent the detected X-ray signal. Fox fails to specifically address the invention as claimed.

Short et al (US 7,403,589) discloses A detector module for a CT imaging system includes a scintillator to convert x-rays to optical photons. The scintillator is optically coupled to a solid-state photomultiplier with internal gain to receive the optical photons and convert them into a corresponding electrical signal output. Short et al fails to specifically address the invention as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jingge Wu/  
Supervisory Patent Examiner, Art Unit 2624  
/Nancy Bitar/  
Examiner, Art Unit 2624

Application/Control Number: 10/774,174  
Art Unit: 2624

Page 6